

ABSTRACT OF DISCLOSURE

A lead zirconate titanate-based thin film is an epitaxial crystal thin film and has a chemical composition represented by the general formula $Pb_{1-x}Ln_xZr_yTi_{1-y}O_3$ (wherein Ln represents any one selected from the group consisting of lanthanum, lanthanoid elements, niobium, calcium, barium, strontium, iron, manganese and tin; and $0 \leq x < 1$, $0.43 \leq y \leq 0.65$) and whose orientation is {111} (including orientations whose tilt angle from the direction perpendicular to the substrate surface is within 15°).